



NCDOT Overview

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Overview

- Major Functions of DOT
- Board of Transportation
- Highway System Overview
- Construction- Road Building Process
- Operations and Maintenance
- Intermodal

North Carolina Department of Transportation

- Employs about 12,000 people
 - Positions range from transportation workers and engineers to archaeologists and ferry captains
- Led by the Secretary of Transportation, a member of the Governor's cabinet
- Oversees all aspects of transportation in North Carolina, including:
 - ◇ Highways
 - ◇ Rail
 - ◇ Aviation
 - ◇ Ferries
 - ◇ Public Transit
 - ◇ Bicycle and Pedestrian Transportation
 - ◇ Division of Motor Vehicles
 - ◇ State Ports
 - ◇ Global TransPark

Board of Transportation

- Works with NCDOT staff members to make decisions about transportation priorities and funding allocations
- Comprised of 19 members; all appointed by the Governor
- Each of the 14 divisions has one representative
- Five at-large members representing:
 - State Ports and Aviation Issues
 - Rural Transportation Issues
 - Environmental Issues
 - Government-Related Finance & Accounting Issues
 - Mass Transit

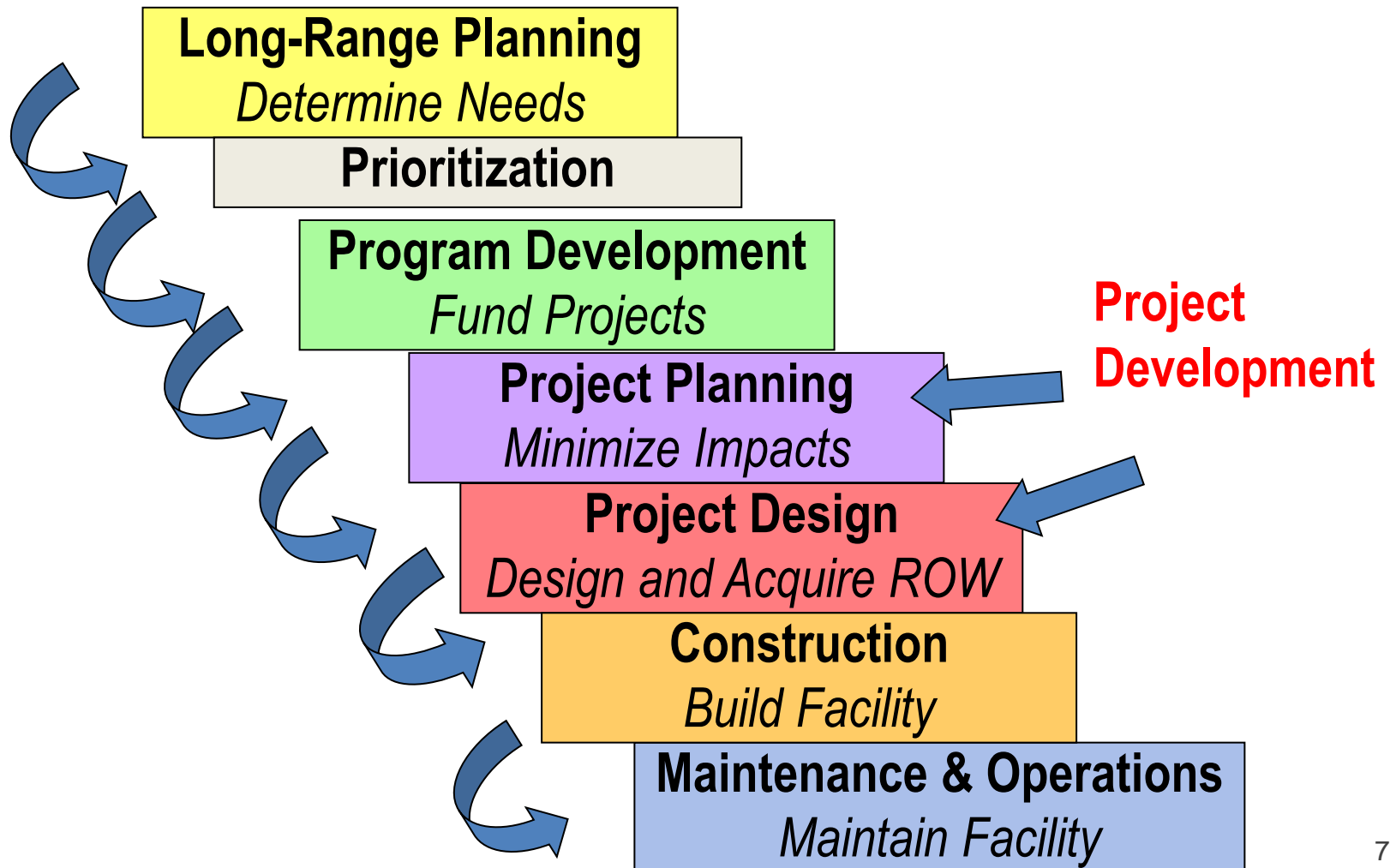
Board of Transportation

- At least 3 members must be registered voters of a political party other than the political party of the Governor
- No more than 2 members may reside in the same highway division
- The Governor must submit proposed appointees to the Joint Legislative Transportation Oversight Committee for a 30-day review/comment period

Highway System

- Responsible for 79,500+ mile highway network, comprised of:
 - Interstates – 1,327
 - Primary
 - US routes – 5,566
 - NC routes – 8,170
 - Secondary – 64,522
 - Farm-to-market or local roads
- Responsible for more than 18,000 bridges, culverts and pipes along the highway system

Transportation Program Life Cycle



Project Development

- Identify purpose and need of transportation project
- Evaluate route alternatives to minimize impacts to the environment, homes and businesses
- Select preferred alternative
- Complete environmental planning documents
- Determine construction limits

Typical Preconstruction Times

(from start of planning to contract letting)

Major new location projects — 8 to 10 years

Widening projects — 5 to 8 years

Bridge projects — 1 to 4 years

Highway Design

- Survey and design highways, bridges and other features, including:
 - Right of way
 - Utilities
 - Drainage systems
 - Retaining walls
 - Lighting
- Goals:
 - Provide cost-effective designs that meet schedule and budget
 - Minimize impacts to the environment
 - Minimize impacts to homes and businesses



Contract Award

- Prepare project contract information
- Advertise project lettings
- Bids are submitted by contractors
- Bids are reviewed for cost and ensuring bids meet requirements
- By law, contract is awarded to lowest bidder that meets all requirements

Phases of Construction Work

Surveying

Clearing

Erosion Control

Bottom Drainage

Rough Grading

Bridge Foundations

Top drainage

Fine grading

Base and Pave

Bridge Beams and
Deck

Guardrail

Markings, Signs,
Signals

Construction

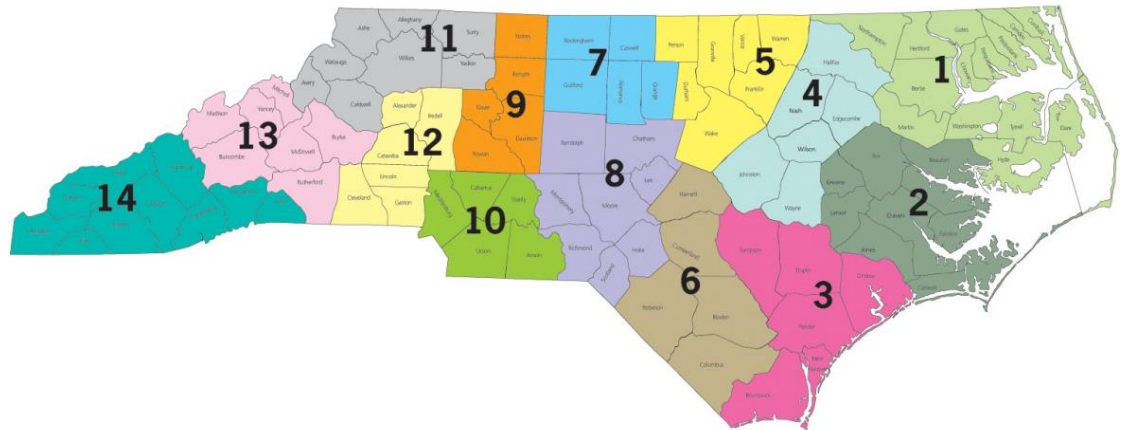
- Provide support for construction contract administration
- Responsible for oversight of approximately 600 active highway-related projects
- Projects are diverse and dynamic
 - Bridges and roads
 - Rest areas
 - Bus terminals
 - Weight stations
 - Communication technologies
- Requires innovation and flexibility

Typical Project Construction Times

- New Location – 3 ½ - 4 years
- Major Pavement Rehabilitation - 2 ½ - 3 years
- Urban Widening - 2 - 3 years
- Bridge Replacement (low impact) - 6–18 months

Field Operations

- Under direction of Chief Engineer
- 14 transportation divisions
- 3 primary functions:
 - Construction
 - Operations/Traffic Management
 - Maintenance



Maintenance and Operations

- Primary and Secondary Maintenance



- Traffic management
 - Roadside environmental activities
 - Snow and ice removal
 - Litter and debris removal
 - Drainage installation and improvements
 - Pavement markings, sign installation & replacement
 - Mowing and vegetation management
- Pavement Preservation
 - Contract Resurfacing
 - Bridge Program Activities
 - Repair, preservation, and replacement

Rail



- Railroads in North Carolina operate more than 3,300 miles of track
- There are 3,834 at-grade public crossings statewide
 - 70% have signal warning devices (gates and/or flashing lights)
- Two Class I and 21 short line railroads operate in North Carolina, transporting more than 1.6 million carloads of freight each year
- The state-owned *Piedmont* provides passenger service between Charlotte and Raleigh 3 times daily; state-supported *Carolinian* provides service between Charlotte and Raleigh with continuing service to New York City

Aviation



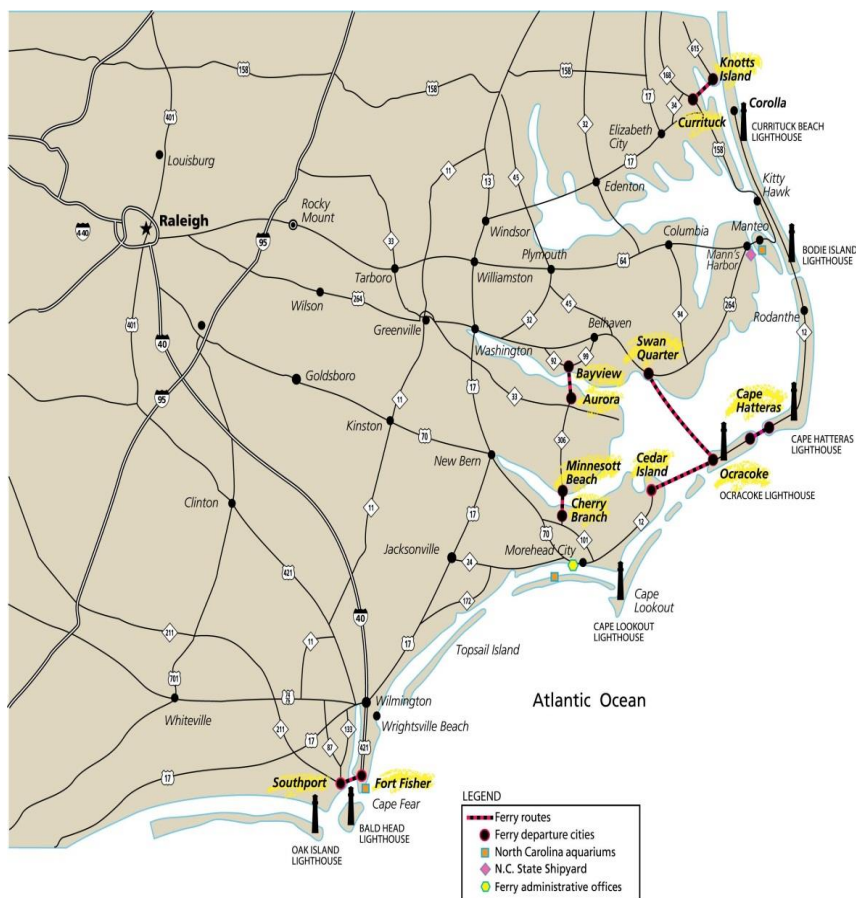
- Responsible for 3 primary functions:
 - State system planning
 - Airport and aviation system development
 - Operations and maintenance of state aircraft
- Aircraft provide a range of services:
 - Statewide emergency response
 - Aerial photography and spatial information for transportation projects
 - Passenger service
- Commercial and general aviation airports contribute about \$26 billion to the state's economy each year and help create more than 108,000 jobs. 18

Public Transportation



- Administer federal and state grants, provides safety and training opportunities, and planning and technical assistance to systems
- Systems are county/municipally owned and provide service in all 100 counties; includes light rail
 - Provided 77.5 million individual trips in 2014
 - Operate 2,398 vehicles
 - Provided 88.9 million miles of service
- 15% ridership increase since 2008
- Systems employ about 5,000 people across the state; \$409 million industry 19

Ferry



- Largest state-owned system on the east coast; second largest in the nation
- Operate 22 ferries across 7 routes; 3 routes tolled
- Carry about 2 million passengers per year
- Vital in hurricane evacuation and post-storm recovery on Outer Banks

Bicycle and Pedestrian

- Touches all aspects of bicycling and walking, including:
 - Designing facilities
 - Creating and implementing safety and educational programs and campaigns
 - Fostering multi-modal planning
 - Integrating bicycling and walking into ongoing activities of NCDOT
 - Mapping cross-state bicycle routes



Division of Motor Vehicles (DMV)

- Registers about 34,500 vehicles per day; 8.8 million vehicles registered in North Carolina
- Conducts more than 8,300 driver license-related transactions daily; 7.4 million licensed drivers in North Carolina
- Oversees administrative hearings, DWI revocations and insurance lapses
- Tracks and audits more than 5.9 million vehicle emissions inspections and more than 3 million safety inspections
- DMV's License and Theft Bureau recovered 911 stolen vehicles valued at \$7.4 million in 2014



Questions?